




---

## Technical Session Block 1 10–10:30 a.m.

---

### HAZARDOUS MATERIALS

#### Chemical Facility Anti-Terrorism Standard: Managing Compliance Utilizing a Web-Based Tool

*Keith Duval, University of Pittsburgh  
Dover Ballroom*

Maintaining compliance with the U.S. Department of Homeland Security's Chemical Facility Anti-Terrorism Standard is a challenge. Facilities which possess Chemicals of Interest are required to maintain an accurate inventory of these chemicals to demonstrate regulatory compliance. The University of Pittsburgh EHS Department, along with the university's Purchasing Department, has developed a novel approach to maintaining a real-time, accurate inventory of Chemicals of Interest on campus—a web-based procurement tool which links university buyers to contracted suppliers. This presentation will focus on the modifications of the procurement system that enables EHS to review Chemical of Interest orders and maintain an accurate inventory. Challenges, obstacles, and lessons learned will be examined.

### FIRE SAFETY

#### Evolution of a Fire Safety Program

*Roger Wright, West Virginia University  
Terri Konchesky, West Virginia University  
Bill Graham, Morgantown Fire Department  
Waterview Ballroom*

The fire safety program has evolved significantly at West Virginia University EHS. This session will show attendees how today's fire safety program at the university came to be, including the development of the "Up in Smoke" program that revolved around fire safety training. Come hear about this program, which received the 2006 CSHEMA "Perks for Peers" award.

### EMERGENCY MANAGEMENT

#### Flash Flood at the University of Louisville

*Dennis Sullivan, University of Louisville  
Grand Ballroom, Salon VI*

On Tuesday Aug. 4, 2009, the National Weather Service forecasted occasional showers; but by 9:30 a.m., the University of Louisville was facing a crisis after receiving almost seven inches of rain. This presentation will discuss the emergency operation phase of the flood and the subsequent recovery efforts. Participants will learn of the difficulties involved in this operation and will be able to take away knowledge that may assist them in response to a similar major event.

### RADIATION SAFETY

#### Going Digital: Modernizing Radiation Safety for X-Ray Producing Machines

*Deborah Hodefi, University of Maryland-  
Baltimore*

*Grand Ballroom, Salon IX–X*

Radiation safety programs that cover radiation-producing machine use at a university hospital present many challenges to the safety professional. Digital radiography, flat panel fluoroscopy, multi-detector CT, and CT fluoro are rapidly becoming the norm. Regulations particular to these technologies are sparse and systems vary widely between vendors. The focus of this session is building a program that adapts to changing technology, providing quality assurance that goes beyond regulatory requirements.

### OTHER

#### When the DEA comes knocking ...

*Janice Dodge, Florida State University  
Grand Ballroom, Salon VII–VIII*

The Drug Enforcement Administration has increased its enforcement of controlled substance regulations in research arenas and research use of controlled substances is undergoing scrutiny that was not typical 10–15 years ago. At Florida State University, EHS was asked to develop a program to provide guidance to researchers and bring them in compliance with DEA requirements. This presentation describes the approach used at this university to provide assistance to researchers and ensure that they operate in accordance with federal and state regulations.

---

## Technical Session Block 2 10:40–11:10 a.m.

---

### RADIATION SAFETY

#### A Case Study of a Response to a P-32

##### Spill

*Peter Ashbrook, University of Missouri  
Grand Ballroom, Salon IX–X*

In November 2009, University of Missouri EHS received a call from a researcher about a contamination incident involving P-32. Although only 10 micro curies were involved, contamination was found in several buildings. This presentation will review how the incident developed, how EHS responded and dealt with the media, and the after action report. It is hoped that this case study will be of assistance in helping others prepare for response to radiation contamination incidents.

HAZARDOUS MATERIALS

**Chemical Facility Anti-Terrorism Standards Compliance**

*Brad Huntsman, U.S. Department of Homeland Security*

**Dover Ballroom**

The U.S. Department of Homeland Security will provide an overview of the Chemical Facility Anti-Terrorism Standards (CFATS) as well as the latest information on the status of implementation of the program. CFATS is protecting thousands of high-risk facilities, including colleges and universities, critical to the United States and global economy against theft and diversion, sabotage, cyber-attacks, and off-site consequences. These innovative risk-based standards were designed to drive continuous improvement and performance while allowing flexible site-specific decision-making. CFATS provides a model for cutting-edge security management. Affected facilities range from large-scale chemical plants to hospitals, universities, and warehouses that contain at least one of more than 300 "chemicals of interest" exceeding a threshold quantity.

HAZARDOUS MATERIALS

**Handling and Managing Difficult Waste Streams**

*Shane Zuffante, Triumvirate Environmental*

**Grand Ballroom, Salon VI**

Handling and managing difficult wastes streams is a complicated task for any EHS department. Finding a highly reactive chemical in a laboratory is dangerous and costly. This discussion will be on assisting you to manage your peroxide forming chemicals in the lab. Specific topics covered include high hazardous/explosive material, stimuli, consequences of improper management, movement and stabilization of reactive chemicals, and tips for preventing highly hazardous situations.

MANAGEMENT

**Reorganization of an EHS Office to Meet Demands**

*Patrick Wolf, University of Maryland-Baltimore*

**Grand Ballroom, Salon VII-VIII**

As the government continues to churn out new and more in-depth regulations, the research engine continues to fund additional research, and public universities continue to realize budget cuts, EHS offices are faced with the continued challenge of doing more with less. In order to meet the demands, the EHS office at the University of Maryland-Baltimore revamped its organizational structure to establish an effective and efficient organization capable of meeting the everyday needs of the university community. This presentation addresses the major changes in the organizational structure, the outcome of the implementation, and recommendations.

FIRE SAFETY

**Residence Hall Fire Safety: A Live Fire Side-By-Side Burn Demonstration**

*Bryan Makinen, Eastern Kentucky University*

**Waterview Ballroom**

On Aug. 11, 2009, Eastern Kentucky University, in conjunction with the Richmond Fire and Rescue Department, conducted a safety presentation which incorporated a live fire side-by-side burn for its residence hall coordinators and residence hall assistants prior to the start of the semester. The purpose of this demonstration was to increase fire and life safety awareness and increase compliance with monthly residence hall inspections. This session will offer an overview of this event.

---

**Technical Session Block 3  
11:20-11:50 a.m.**

---

LABORATORY SAFETY

**Anesthetic Gas Use Safety Program**

*John Lemanski, Arizona State University*

**Grand Ballroom, Salon VI**

Arizona State University recently developed an Anesthetic Gas Use Safety Program to educate researchers about exposure potential to chemicals used as anesthetics. Waste anesthetic gases, toxicity, recommended exposure limits, and methods to reduce exposures during generation of these anesthetics are described. An overview of the web-based training program will be presented.



**TIER Environmental Services, LLC**  
5745 Lincoln Highway  
Gap, PA 17527  
(800) 652-4400    [www.tierde.com](http://www.tierde.com)

- ❖ Remediation
- ❖ Industrial Maintenance
- ❖ Tank Management
- ❖ Asbestos Abatement
- ❖ Waste Management
- ❖ Transportation
- ❖ Railcar / Truck Cleaning
- ❖ OSHA / RCRA / DOT Training

**FIRE SAFETY**

**Creating the Resident Assistant Fire Academy at a Small College**

*John Soucy, Gordon College  
Waterview Ballroom*

Campus fire safety awareness is a major concern. How to accomplish this with limited resources is critical. Gordon College has conducted a Resident Assistant (RA) Fire Academy during RA training week. The academy consists of four segments: fire safety awareness, dorm room inspection, fire extinguisher use, and the Firefighters Muster (which is conducted by the local fire department). This session will share the essential elements of the program, offer tips concerning some of the lessons we've learned, and address how it was accomplished with limited resources.

**HAZARDOUS MATERIALS**

**Keeping the World Safe: Physical Security Strategies for Hazardous Materials**

*Maureen Kotlas, Harvard University  
Dover Ballroom*

Universities, colleges, and hospitals use and store a variety of biological, chemical, and radioactive materials. The United States government has demonstrated concern that some of these materials may be attractive targets for terrorist attacks either through theft, sabotage, or release and has expanded the regulatory focus to address security. Institutions may also have concerns for criminal theft, vandalism, or other security threats. The physical security system is a key component of a comprehensive security plan. This presentation will provide EHS professionals with a fundamental understanding of physical security in the built environment, including design concepts, building hardening, and building security technologies.

**RADIATION SAFETY**

**Space City Thunder: An Irradiator Counterterrorism Tabletop Exercise**

*Susanne Savely, Baylor College of Medicine  
Grand Ballroom, Salon IX-X*

The National Nuclear Security Administration/Global Threat Reduction Initiative, part of the U.S. Department of Energy, provided Baylor College of Medicine with irradiator security upgrades and a three-day Global Threat Reduction Initiative irradiator security training at the Y-12 National Security Complex. In addition to the security upgrades and training, the National Nuclear Security Administration and the Federal Bureau of Investigation held a table-top irradiator counterterrorism exercise entitled Space City Thunder at Baylor College of Medicine on Sept. 3, 2009. This session will look at the preparations needed for such an exercise and the results.

**MANAGEMENT**

**Who's Filling Your Chair? Changes in the EHS Field**

*Courtney Kerr, Eastern Virginia Medical School  
Grand Ballroom, Salon VII-VIII*

EHS work is constantly evolving as new regulations and priorities develop, but now the career field itself is changing. This presentation will discuss the future trends in the EHS job market, the aging of the current staff, consolidation of safety programs, reduced interest in the traditional EHS job market, increased focus on green jobs, and the apparent reduction in education/training and lack of awareness in the field. The future of EHS is happening now!

**Technical Session Blocks 4 & 5  
2-3:10 p.m.**

**RISK MANAGEMENT**

**Building the Framework for Total Cost of Risk**

*Paul Pousson, University of Texas System  
Dover Ballroom*

During these turbulent economic times, institutions of higher education are facing challenges that include closer scrutiny of costs and expectation of cost containment. With this ever-increasing focus on budgets and fiscal responsibility, developing an understanding of the costs that drive risk management and EHS programs has emerged as an essential discipline. Attendees in this session will gain a foundational understanding of the core principles and components of total cost of risk and the bridge that exists between risk management and EHS.

**GENERAL SAFETY**

**Game Day at Tiger Stadium**

*Mike Durham, Louisiana State University  
Waterview Ballroom*

Planning, preparation, and operations during a home game at Tiger Stadium is a complex operation. Tiger Stadium holds more than 92,000 fans, and traditional tailgating activities make the campus attendance nearly 140,000 fans and friends. Motor homes cram the campus and nearby facilities. This presentation will cover the responsibilities and the involvement of EHS personnel for game day, including monitoring motor home lots for carbon monoxide, fire alarm system supervision, and a emergency evacuation and crowd control program.

**SMALL COLLEGES**

**Global Harmonization and Its Effects on EHS**

*Kristine Rossmiller, Drake University  
Grand Ballroom, Salon IX-X*

This presentation will discuss OSHA's changes in the rules of HAZCOM to Global Harmonization. The new Global Harmonization rules will be compared with the current HAZCOM Standard and changes will be emphasized. The significance of the rule change from OSHA will be discussed. Offices should know what to be prepared for in the change and how big of a change this is. The major impacts will be analyzed and the summary of the rule will be presented.

**MANAGEMENT SYSTEMS**

**Health Management System Peer Review Program**

*Saravanan Gunaratnam, National University of Singapore  
Lou DiBernardinis, Massachusetts Institute of Technology  
Grand Ballroom, Salon VI*

Generic EHS management system standards provide a broad framework and do not address the challenges institutions face in managing their unique safety and health risks. Research today has also gone global. It is therefore timely that there is an international standard to define the core elements for every institution EHS management system. This would provide reassurance to all relevant stakeholders and encourage harmonization of safety systems and program. This presentation will provide an overview of how the National University of Singapore and Massachusetts Institute of Technology peer review program has facilitated the development of this international safety standard.

**MANAGEMENT**

**Targeted Methods for Determining the Level of Client Satisfaction with Your EHS Program**

*Robert Emery, University of Texas-Houston  
Grand Ballroom, Salon VII-VIII*

Successful service industries constantly solicit client feedback to gauge how their organization is performing and determine how the client feels about the relationship. University EHS programs are service intensive operations, but unfortunately feedback is typically obtained only from complaints, training course evaluations, accreditation surveys, and passive surveys. This presentation will discuss the value of obtaining client feedback in a more proactive, targeted, and systematic way and review the results of a series of surveys that have been performed at the University of Texas Health Science Center-Houston.

---

**Block 6  
3:20-3:50 p.m.**

---

**GENERAL SAFETY**

**Developing and Implementing a Cost-Effective Online Training Program**

*Otu Inyang, University of Houston  
Grand Ballroom, Salon VI*

The University of Houston EHS department was faced with the challenge of increasing training needs as a result of the university's tremendous growth, without commensurate increase in staffing resources. In anticipation of the Tier One initiative of the university, the EHS department embarked upon the development of online safety training to meet the challenges and align the department with the university's goal. Successes and lessons learned during the development of the training modules as well as technological and administrative challenges will be presented at this session.

**LABORATORY SAFETY**

**The Implementation of Laboratory Self-Inspection and Methods Used to Facilitate Safety Culture**

*Kalpana Rengarajan, Emory University  
Grand Ballroom, Salon IX-X*

This presentation will describe what steps the Emory University EHS Office adopted to improve safety culture among the researchers. The methods include laboratory self inspection by researchers, casual walkthroughs by EHS personnel, and end-of-year EHS validation inspection. These steps have led to improvements in laboratory training and lab inspection processes as well as an interactive environment between the laboratory researchers and the EHS professionals.

**ENVIRONMENTAL**

**PCBs in Building Materials: An Update**

*Sean Reagan, Triumvirate Environmental  
Dover Ballroom*

An emerging environmental health issue with wide-ranging implications is the presence of PCBs in building-related materials, including caulking. With similarities in scope and magnitude to asbestos and lead paint, the EPA recently issued guidance to address the potential risks associated with this issue. This presentation will provide an overview and background on this issue, review the content and practical application of EPA's guidance, and discuss real-life examples of remediating a campus building.



OTHER

**Strategic Planning for a University Environmental Health and Safety Program**

*Peter Reinhardt, Yale University*

*Grand Ballroom, Salon VII-VIII*

At large colleges and universities, it is common to create a department or office that combines institutional environmental health and safety responsibilities and support services. As these organizations develop and mature, it is important to strategically plan their future to best meet the institution's needs. This presentation will describe the strategic planning process recently completed by the Yale Office of EHS, including a review of the department's history, new mission statement, and a five-year plan.

EMERGENCY MANAGEMENT

**Texas Football: EHS Behind-the-Scenes**

*Irezama Anderson, The University of Texas-Austin*

*Peter Schneider, The University of Texas-Austin*

*Waterview Ballroom*

The University of Texas-Austin is home to the nationally ranked Longhorns football team. Each year, home games at Texas Memorial Stadium draw more than 100,000 spectators. The EHS office at the university has a team of 5-6 staff assigned to each game prepared to respond to a variety of incidents, inspect food vendors, and monitor for chemical, radioactive, and biological threats. This presentation describes the role of EHS at these huge events.

**Block 7  
4-4:30 p.m.**

LABORATORY SAFETY

**Development of a Web-Based Laboratory Inspection Tool**

*Jerry Gordon, Cornell University*  
*Grand Ballroom, Salon IX-X*

In 2008-09, staff members from the Cornell University EHS Research Safety Group worked with information technology support to re-engineer the laboratory inspection program and develop a web-based laboratory inspection tool to inspect Cornell's research spaces. The tool is comprised of an online checklist and management program, an administrative program to manage corrective actions and produce summary reports, and a user program to empower campus safety representatives to identify and manage corrective actions within their areas of responsibility. This presentation will primarily be a demonstration of all parts of the web-based inspection tool.

**Year after year, what can make a difference to your lab pack program?**

- Responsive, local service? PSC operates numerous TSDFs across the United States.
- Sustainable disposal methods? PSC directs more waste to recycling, fuel blending, and treatment.
- Experienced technical personnel? PSC labpack provides dedicated, knowledgeable, on-site service.
- Customer service excellence? PSC's priority is simple, accurate billing and dedicated customer service.
- Risk protection? PSC is a financially strong, safe, and compliant industry leader.

Come speak to us at CSHEMA and learn how we can make a difference in your waste program.



**Exhibiting at Booth # 210**

**PSC Environmental Services**

- Abatement Services
- Boiler & Tank Cleaning
- Chemical Moves
- Compliance Audits
- Contingency Plans
- Cylinder Management
- Emergency Response
- Hazardous & Nonhazardous waste disposal
- Lab Packing
- LTL & FTL Transportation
- Recycling & Reuse Programs
- Site Remediation



[www.PSCNow.com](http://www.PSCNow.com)  
877-772-6693

GENERAL SAFETY

**Fall Protection on Campus Roofs**

*Steven Deck, University of Maryland–Baltimore  
Grand Ballroom, Salon VI*

This session will cover the basics of fall protection for employees and contractors working on campus roofs, including when does OSHA's construction or general industry fall protection standard apply and the newly proposed OSHA standard. Participants will also be provided an overview of the key elements of an effective written fall protection program.

RISK MANAGEMENT

**Photo Documentation for Loss Prevention and Property Conservation**

*Patrick Durbin, The University of Texas System  
Dover Ballroom*

Providing photo documentation for insurance purposes can be an invaluable tool in many circumstances. In addition to simply helping with an insurance claim, pictures can document existing conditions prior to or after a loss, serve to document nearby buildings and landscape conditions prior to breaking ground on a new construction project, and even be part of the inventory for an extensive art collection. This presentation will present various ways to use photo documentation for loss prevention and property conservation purposes as well as highlight a project where this was used to document conditions after a loss.

MANAGEMENT SYSTEMS

**Regulatory Compliance and Training Assessment Tools**

*Bruce Backus, Washington University in  
St. Louis*

*Matt Finucane, University of Pennsylvania  
Grand Ballroom, Salon VII–VIII*

To help university faculty and staff better understand their many regulatory compliance and training requirements (including those beyond EHS), the University of Pennsylvania and Washington University in St. Louis have developed online tools to guide their staff through the process. This session will discuss these tools.

EMERGENCY MANAGEMENT

**Teamwork for Integrated Emergency Management**

*James Wright, The University of Texas–Dallas  
Waterview Ballroom*

This session will have an emphasis on the importance of multi-disciplinary planning and teamwork, including organizing and motivating institutional teams and risk assessments, understanding planning strategies and tools, and responding effectively when an emergency occurs.

**Block 8**

**4:40–5:10 p.m.**

EMERGENCY MANAGEMENT

**The Development and Application of a Large University Emergency Operations Center**

*Allen Clark, Arizona State University  
James Gibbs, Arizona State University  
Bruce Hooper, Arizona State University  
Waterview Ballroom*

As one of the largest universities in the United States, Arizona State University hosts a number of large events, including a commencement ceremony that featured President Barack Obama as the keynote speaker. This session will examine all aspects of the preparation of the Emergency Operations Center, including design considerations, management, and special National Institute of Management Systems training for all Emergency Operations Center participants, which functioned as a command post.



Precision. Presence. Simplicity.

OUR SPECIALTY:  
**MORE THAN JUST GAS.**

The highest-purity gases and precision blends, where you need them, when you need them—worry free. That's our specialty. Airgas has the technical expertise and the national presence to meet your specialty gas and equipment needs. Take advantage of our proven supply chain strategies that remove all the hassles of dealing with specialty gases.

Visit Airgas at Booth #100 You'll find it with us.  
**Airgas**

For more information, visit our website: [www.airgas.com](http://www.airgas.com)



#### MANAGEMENT SYSTEMS

##### **EPA Peer Audit**

*Patty Olinger, Emory University*

*Grand Ballroom, Salon VII–VIII*

During April 2009, Emory University completed the EPA Peer Audit Program. The auditors visited five different locations and inspected 20 percent of these locations, including research labs, arts and theater, clinical and hospital spaces, mechanical spaces, janitorial closets, and shops. There were three types of findings, categorized as EPA regulated, state regulated, or OSHA/best practices. This presentation will share the EHS Office's experience of pre-audit preparation and post-audit steps taken to correct the findings cited by the auditors using a management systems approach.

#### HAZARDOUS MATERIALS

##### **Hazard Material Awareness for Campus Security Personnel**

*Dennis Hof, University of Texas System*

*Dover Ballroom*

From chemistry and research labs to medical facilities and machine shops, first responders on a college campus could face potential chemical or biological hazards every time they respond to a call. As first responders, campus security and police need to have an understanding of chemical and biological hazards they could encounter. This session will examine information needed by to raise their awareness of issues found on college campuses.

#### GENERAL SAFETY

##### **Managing Custodial Safety Using a Standardized Cleaning System**

*Jennifer Root, University of Texas–Austin*

*Grand Ballroom, Salon VI*

This session describes how custodial services at the University of Texas–Austin uses a standardized cleaning system to evaluate work tasks, identify safety challenges, and manage risks. Processes are in place to address workplace safety hazards as well as cleaning laboratories and working at night. Since starting this program, the university has seen a steady decrease in frequency and severity of workplace injuries.

#### GENERAL SAFETY

##### **A Survey of Environmental Safety Issues at Medical Clinics**

*Susanne Savely, Baylor College of Medicine*

*Grand Ballroom, Salon IX–X*

Safety walkthroughs or inspections were performed for 20 clinics located both onsite and offsite from a major medical center clinic. A comprehensive checklist with 90 questions was used to evaluate compliance with institutional, local, state, and federal guidelines and regulations regarding emergency preparedness, infection control, hazardous waste management, patient safety, fire safety, and general safety. This session will share the findings of these walkthroughs, including the difference between on-site and off-site clinics' knowledge of infection control.

---

### **Block 9 5:20–5:50 p.m.**

---

#### RISK MANAGEMENT

##### **Academic Continuity and Resilience Planning**

*Mike Mastrangelo, University of Texas System*

*Waterview Ballroom*

Higher education institutions face new and evolving threats that require adaptive strategies. In continuity efforts, many use frameworks of business continuity planning that may overlook plans for their prime missions of teaching and research. Continuity is enabled by technology, but goes beyond this to include the expectation that learning will continue despite adversity. Recommendations will be offered on strategies such as collaborative agreements among institutions to specifically address academic continuity, the use of shared services such as disaster recovery sites, the shared use of tissue storage sites and vivaria for important research projects, telecommunications, and collaborative-wide contracts with disaster remediation companies.

#### OTHER

##### **Dirty Sock Syndrome: An EHS Case Study**

*Denise Daggett, The Scripps Research Institute*

*Dover Ballroom*

Over the course of several years, employees reported musty, locker room-like odors in two research-oriented laboratory buildings. An industrial hygiene evaluation was undertaken to characterize the problem. Direct reading instruments and air sampling revealed no conclusive data to help identify the cause of the odor. A literature search revealed a condition seen in air handler systems known as “dirty sock syndrome.” Utilizing swab sampling and analysis, bacterial contamination was identified as the likely source of the odors. This session will examine the findings and the difficulties encountered in trying to remedy the situation.

#### MANAGEMENT

##### **Integrated Workflow Management for Institutional Review Committees**

*James Jaeger, University of Maryland–Baltimore*

*Grand Ballroom, Salon IX–X*

Investigators and committee members have long desired integration of the review processes of the institutional committees that address human use, animal use, biosafety, and radiation safety. The University of Maryland–Baltimore implemented a database that preserves committee independence, integrates workflow, and eliminates wasted effort for investigators. This session will examine this process, which has been in use for more than a year.

#### MANAGEMENT

##### **Tracking Safety and Health Services**

*Craig Lefevre, West Virginia University*

*Grand Ballroom, Salon VII–VIII*

West Virginia University EHS developed an activities database using Microsoft Access to track safety and health services provided to campus clients. The daily entries include data such as who is the client, what service was provided, how much time was spent, the name of the project, and a note section used describe the tasks. The EHS Activities Database can be used for many applications. This session will discuss the benefits of this programs.